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What is claimed is:

1. (amended) A tissue regeneration matrix comprising a film with a honeycomb structure having an average cavity inner diameter from 0.1 to 20  $\mu\text{m}$ , composed primarily of a polymer compound and a phospholipid.

2. A tissue regeneration matrix according to claim 1, characterized in that said polymer compound is a biodegradable polymer.

3. A tissue regeneration matrix according to claim 2, wherein said phospholipid is at least one type selected from the group consisting of phosphatidylethanolamine, phosphatidylcholine, phosphatidylserine, phosphatidylglycerol and their derivatives.

4. A tissue regeneration matrix according to claim 3, wherein said phospholipid is phosphatidylethanolamine.

5. A tissue regeneration matrix according to claim 4, wherein said phospholipid is L- $\alpha$ -phosphatidylethanolamine-dioleoyl.

6. A tissue regeneration matrix according to claim 1, characterized in that the compositional ratio of the polymer compound and the phospholipid is 10:1 to 500:1 by weight.

7. (deleted)

8. A tissue regeneration matrix according to claim 1, characterized in that the tissue is cartilage tissue.

9. A tissue regeneration complex comprising a tissue regeneration matrix according to claim 1 and cells held in said tissue regeneration matrix.